

## CAR Nitric Acid Production Protocol v2.0 Comments

### *Section 2.2 Project Definition*

- Inclusion of Primary Abatement Project
- ClimeCo is requesting the inclusion of a Primary Abatement definition under Section 2.2. Primary Abatement is defined in Table 2.1, “Potential N<sub>2</sub>O Abatement Measures”, but is not included under a formal definition heading in the subsequent section. Reduction of N<sub>2</sub>O by modification of the ammonia oxidation process and/or catalyst is a recognized form of nitrous oxide reduction. Because these modifications occur within the AOR itself, the baseline and project calculations can be transferred from the methodology as applying to secondary abatement projects. Use of the word “secondary” with regards to calculations would have to be replaced by “primary or secondary” throughout the version.

### *Section 5.1.1 Determination of HNO<sub>3,MAX</sub> and HNO<sub>3,MAX,scaled</sub>*

- Removal of hourly HNO<sub>3,MAX,scaled</sub>
- ClimeCo is questioning the removal of the reference for hourly from Section 5.1.1 which allowed the ability to determine an hourly HNO<sub>3maxscaled</sub> in Secondary Projects. Hourly was referenced in the Errata for Secondary and Tertiary Projects, and is still referenced in Section 5.2.1 of Version 2.0 for Tertiary Projects. It is the opinion of ClimeCo that the use of hourly would lead to a more accurate calculation and should be allowed for Secondary Projects.

### *Section 5.2.3 Quantifying Baseline Emissions*

- “Baseline GHG emissions are based on the quantity of N<sub>2</sub>O in the tail gas immediately before it enters the tertiary catalyst or NSCR.”
- ClimeCo requests that the word “immediately” be modified to include the monitoring of N<sub>2</sub>O concentration at any point after the absorption tower and before the tertiary catalyst or NSCR. The N<sub>2</sub>O concentration in the tail-gas will not increase nor decrease between these two locations. The word “immediately” prevents employing the monitoring systems in more accessible or available areas of the tail-gas line, e.g. installation on the opposite side of the tail-gas expansion turbine. As there is no threat to the creation or destruction of N<sub>2</sub>O after the absorption tower, and tertiary systems are permitted to be employed on either side of the tail-gas expansion turbine, ClimeCo suggests that this subpart be modified to allow monitoring of baseline N<sub>2</sub>O concentration at any point between the absorption tower and the tertiary catalyst or NSCR.

### *Table 6.1, Table 6.2, Section 7.3, Table 8.3, Section 5.1.2, Section 5.1.3, Section 5.1.4, and Section 5.2.2*

- “Ammonia to Air Ratio”
- ClimeCo feels that the use of the term Ammonia To Air Ratio is misleading since the formula NH<sub>3</sub>/(NH<sub>3</sub> + air) does not actually yield the Ammonia to Air Ratio but the fraction of NH<sub>3</sub> in the inlet gas stream.

### *Section 6.2.1 - Frequency of Testing*

- The calibration error test for the analyzer and flow meter was removed from daily requirements and are now required on a quarterly basis.
- ClimeCo requests that CAR reconsider the Protocol's clarification. Current practice includes daily calibration error tests. A facility cannot make adjustments as required on a daily basis without performing the error tests. These are conducted pursuant to Part 75 and should still be required on a daily basis. ClimeCo recommends that all of our customers continue daily calibration error tests. As CARB is currently considering adopting the Nitric Acid Production Protocol, it is suggested that CAR increase its accuracy standards to ensure that it will meet CARB / USEPA Part 75 criteria. Reducing these CEMS calibration tests can lead to false reporting and the loss of quarterly data. Strengthening this requirement would increase reporting accuracy for both CAR's standards and further align itself for potential CARB inclusion.

### *Section 7.4 – Reporting Period and Verification Cycle*

- “A reporting period must represent a full campaign, defined as the full length of operation of one set of primary catalyst gauzes.”
- ClimeCo requests the modification of the Protocol's definition of a reporting period to include sub-campaign verifications. These shorter verification periods are important to both the nitric acid industry and CAR. Because CRTs are issued under this Protocol in such large volumes, flexibility is necessary for the convenient sale of credits upon buyer demand. This becomes increasingly important as the implementation of AB-32 approaches and, assuming this Protocol will be accepted under ARB AB-32, the demand for nitric acid offsets by covered entities will increase. In order to provide flexibility and convenience to both the buyers and sellers of CRTs, CAR should allow sub-campaign verifications as it will increase the number of CRT transactions. For instance, if a verification period spans multiple calendar years, sub-campaign verifications would allow a project developer to issue Vintage “Year X” credits during “Year X” rather than in the subsequent year. This would allow facilities with a need to meet their “Year X” obligations immediately to purchase CRTs much more easily. Additionally, sub-campaign emissions reductions calculations are conservative relative to full-campaign numbers and also incur supplementary verification costs. ClimeCo has constructed and quantitatively analyzed many different operating scenarios, which prove the conservative nature of sub-campaign verifications. These were subsequently submitted to CAR under separate cover.

General Comment: ClimeCo recommends that CAR add a comment regarding potential regulatory requirements under the PSD Tailoring Rule. If a facility is subject to the PSD Tailoring Rule and is required to install Best Available Technology (BAT), the facility should be eligible to receive CRTs for emission reductions in excess of the PSD BAT requirement. For instance, BAT may be defined as 80% abatement. If a facility exceeds this and achieves 99% abatement, they should be eligible for the 19% they are over controlling. This is an important point for facilities installing more expensive tertiary control technologies.